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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,937	11/20/2001	William C. Black	X-933 US	1537
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XILINX, INC ATTN: LEGAL DEPARTMENT 2100 LOGIC DR SAN JOSE, CA 95124			EXAMINER WONG, LINDA	
			ART UNIT	PAPER NUMBER
			2611	
			MAIL DATE	DELIVERY MODE
			08/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/989,937

Applicant(s)

BLACK, WILLIAM C.

Examiner

Linda Wong

Art Unit

2611

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 30 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee, under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
DAVID C. PAYNE  
SUPERVISORY PATENT EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because: Response to Arguments

1. Applicant's arguments filed 7/30/2007 have been fully considered but they are not persuasive.

a. Response to Arguments section of the Office Action

Argument A: The applicant contends

"In paragraph 2.a.) of the Response to Arguments section on page 2 of the Office Action, the Examiner violates the anticipation standard as set forth in MPEP § 2131. In particular, rather than showing how Nakayama expressly or inherently teaches each and every element of Applicant's claims, the Examiner instead attempts to show that Nakayama teaches limitations that are purportedly described in Applicant's instant specification. As mandated by MPEP § 2131, however, an anticipation rejection must not be based on the disclosure contained within Applicant's instant specification, but rather must be based upon the claimed elements and their limitations. Thus, Applicant respectfully submits that the Examiner's anticipatory rejections of Applicant's claims, which are based upon improper grounds as presented in the Response to Arguments section of the Office Action, do not conform to a proper showing of anticipation."

Rebuttal to Argument A: The examiner respectfully disagrees. The applicant points to MPEP 2131 but fails to indicate the section within his arguments. The applicant indicates "anticipation rejection must not be based on the disclosure contained within Applicant's instant specification, but rather must be based upon the claimed elements and their limitations." The examiner would like to point to MPEP 2173.02, Clarity and Precision [R-3] - 2100 Patentability. MPEP 2173.02 states

"If the language of the claim is such that a person of ordinary skill in the art could not interpret the metes and bounds of the claim so as to understand how to avoid infringement, a rejection of the claim under 35 U.S.C. 112, second paragraph, would be appropriate. See *Morton Int'l, Inc. v. Cardinal Chem. Co.*, 5 F.3d 1464, 1470, 28 USPQ2d 1190, 1195 (Fed. Cir. 1993). However, if the language used by applicant satisfies the statutory requirements of 35 U.S.C. 112, second paragraph, but the examiner merely wants the applicant to improve the clarity or precision of the language used, the claim must not be rejected under 35 U.S.C. 112, second paragraph, rather, the examiner should suggest improved language to the applicant.

For example, a claim recites "a suitable liquid such as the filtrate of the contaminated liquid to be filtered and solids of a filtering agent such as perlite, cellulose powder, etc." The mere use of the phrase "such as" in the claim does not by itself render the claim indefinite. Office policy is not to employ per se rules to make technical rejections. Examples of claim language which have been held to be indefinite set forth in MPEP § 2173.05(d) are fact specific and should not be applied as per se rules. The test for definiteness under 35 U.S.C. 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). If one skilled in the art is able to ascertain in the example above, the meaning of the terms "suitable liquid" and "solids of a filtering agent" in light of the specification, 35 U.S.C. 112, second paragraph, is satisfied. If upon review of the claim as a whole in light of the specification, the examiner determines that a rejection under 35 U.S.C. 112, second paragraph, is not appropriate in the above-noted example, but is of the opinion that the clarity and the precision of the language can be improved by the deletion of the phrase "such as" in the claim, the examiner may make such a suggestion to the applicant. If applicant does not accept the examiner's suggestion, the examiner should not pursue the issue."

As per the section indicated above, the claims must be read in light of the specification in order for clarity and appropriate interpretation. Regarding the limitation "an amplifier having an output impedance and an input continuously coupled to receive an input signal", the examiner refers to Fig. 14 as to the applicant's definition of "continuously coupled to receive an input signal". The examiner has rejected the claims based on the Fig. 14 for better clarity of the applicant's invention. The rejection as stated in the office action mailed on 6/1/2007 anticipates the claimed limitations as per the criterion as set for 35 USC 112, second paragraph, wherein the claims are rejected based on the specification.

Argument B: The applicant further contends

"In addition, to establish a prima facie case of obviousness, a third criteria requires that the prior art reference (or references when combined) teach or suggest all the claim limitations. (See MPEP § 2142). As discussed above, however, the Examiner attempts to show that Nakayama teaches limitations that are purportedly described in Applicant's instant specification, rather than showing how Nakayama teaches or suggests all the claim limitations. Thus, Applicant respectfully submits that the Examiner's obviousness rejections of Applicant's claims, which are based upon improper grounds as presented in the Response to Arguments section of the Office Action, do not properly establish a prima facie case of obviousness.

Since the Examiner maintains anticipatory and obviousness rejections of Applicant's claims that are based upon improper grounds of rejection, Applicant respectfully requests that the finality of the rejections be withdrawn. Notwithstanding the impropriety of the finality of the rejections, Applicant nevertheless addresses each rejection individually to further advance prosecution."

Rebuttal to Argument B: The examiner respectfully disagrees. As per the rebuttal stated above, the examiner has rejected the claim based on the criterion as set forth in the MPEP 2137.02. The examiner has shown the claimed limitations are disclosed in the Nakayama.

b. Regarding claims 1,10, the applicant contends

"To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). (See MPEP § 2131). Therefore, all claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. §102. Applicant respectfully submits that Nakayama does not teach every element of claims 1 and 10, and therefore, fails to anticipate claims 1 and 10.

Applicant's claim 1, for example, at least sets forth "an amplifier," e.g., amplifier 250 of FIG. 4, "having ... an input continuously coupled to receive an input signal" and "a feed-forward circuit," e.g., feed-forward circuit 270, "in parallel with the amplifier." The Examiner nevertheless suggests a correspondence between the amplifier of FIG. 14, which is part of feed-forward circuit 270, and the amplifier as recited in Applicant's claim 1. Paragraph [0038] of the instant specification, however, discloses that amplifier 580, capacitor 566, and switch 633, in an exemplary embodiment, corresponds to feed-forward circuit 270. As can further be seen in FIG. 14, feed-forward

circuit 270, in an exemplary embodiment, is coupled in parallel with amplifier, e.g., 250, as is required by claim 1. Thus, contrary to the Examiner's suggestion, the amplifier of FIG. 14 cannot correspond to the amplifier as recited in Applicant's claim 1 because the amplifier of FIG. 14 is part of feed-forward circuit 270, which in turn, is coupled in parallel with amplifier 250. Accordingly, the input to the amplifier as recited in Applicant's claim 1 is "continuously coupled to receive an input signal" despite the Examiner's suggestion to the contrary." The examiner respectfully disagrees. Based on the applicant's specification, paragraph 0014, the applicant discloses "A first circuit branch includes a switched capacitor that includes a switch 631 and capacitor 560. A second circuit branch includes a resistor 570 in series with capacitor 564 controlled by

switch 633." As shown in Fig. 14, a switch, label 633, controls the input to the amplifier, label 580. Based on the specification, Nakayama et al discloses the limitation as discussed. Furthermore, when the switches are closed, the input to the amplifier will be continuously connected. The rejection as stated below reflects the described and recited invention.

c. Regarding claims 2-3 and 11-12, such claims are dependent on claim 1. Based on the rebuttal of claim 1, the rejections of claims 2-3 and 11-12 stand as stated.

d. Regarding claims 4-5 and 13-14, the applicant contends

"Claims 4-5 and 13-14 are rejected under 35 USC §103(a) as being made obvious by the teachings of Nakayama in view of U.S. Patent No. 3,886,470 to O'Neil et al (hereinafter "O'Neil"). Applicant respectfully traverses the rejection.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (See MPEP § 2142).

Concerning the third criteria which must be met to establish prima facie obviousness of a claimed invention, the combination of Nakayama and O'Neil must be shown to teach or suggest all of Applicant's claimed limitations. In regard to Applicant's Claims 1 and 10 as discussed above, however, Nakayama requires the input to amplifier 30 to have a non-continuous connection to its input signal through operation of switch 20 (see FIG. 2 and column 2 line 65 to column 3 line 8), which is in direct contrast to Applicant's claims 1 and 10.

Combining Nakayama with O'Neil in order to remedy such a deficiency also fails with respect to the first criteria, which must be met to establish prima facie obviousness of a claimed invention. "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious." (See MPEP § 2143.01 VI). Assuming arguendo that the Office Action were to suggest that Nakayama's alternating connection to amplifier 30, as facilitated by switch 20, were to be modified with the continuous input connection to the amplifier of O'Neil, then it would impermissibly change the operation of Nakayama. In particular, Nakayama teaches that "switches 16-21 serve to sample the input signal IN in a known manner." (See column 3, lines 6-8). Thus, modifying Nakayama with O'Neil would prohibit Nakayama from sampling the input signal in a known manner in violation of MPEP § 2143.01 VI.

Since the combination of Nakayama and O'Neil fails to establish a prima facie case of obviousness with respect to Applicant's claims 1 and 10, it follows that the combination of Nakayama and O'Neil similarly fails with respect to the dependent claims of claims 1 and 10. In particular, dependent claims 4-5 and 13-14 include all of the limitations of claims 1 and 10, respectively, and recite additional features, which further distinguish these claims from the combination of Nakayama and O'Neil. Applicant respectfully submits, therefore, that claims 4-5 and 13-14 patentably distinguish over the combination of Nakayama and O'Neil and are in condition for allowance."

The examiner respectfully disagrees. As per the rebuttal of claims 1 and 10, the recited limitation is anticipated and shown as disclosed by Nakayama in light of the applicant's specification. Thus, the rejection follows the third criteria.

The applicant contends combination of Nakayama and O'Neil will modify Nakayama's invention. The examiner respectfully disagrees. The input to the amplifier as disclosed by Nakayama is subjected to switches as well as capacitors. By adding a resistive element in series with the capacitor as disclosed by O'Neil, the resistive element will help better regulate the input to the amplifier and as per the motivation stated in the office action, provide a small correction to the phase characteristic of the delay path whose dominant effect occurs at low frequencies. Adding a resistive element does not change Nakayama's invention since the amplifier will receive the input given the existence of the resistive element or lack of the resistive element. Thus, the rejection of claims 4-5 and 13-14 stand as stated in the office action mailed 6/1/2007.

e. Regarding claim 9, the applicant contends

"Claim 9 is rejected under 35 USC §103(a) as being made obvious by the teachings of Nakayama in view of U.S. Patent No. 5,493,246 to Anderson. Applicant respectfully traverses the rejection.

Concerning the third criteria which must be met to establish prima facie obviousness of a claimed invention, the combination of Nakayama with Anderson must be shown to teach or suggest all of Applicant's claimed limitations. In regard to Applicant's claim 1 as discussed above, however, Nakayama requires the input to amplifier 30 to have a non-continuous connection to its input signal through operation of switch 20 (see FIG. 2 and column 2 line 65 to column 3 line 8), which is in direct contrast to Applicant's claim 1.

Thus, combining Nakayama with Anderson, or any other reference that teaches a continuous connection to the input of an amplifier, to obtain a correspondence to Applicant's claim 1 is violative of the first and third criterion for establishing prima facie obviousness of Applicant's claim 1. It further follows that the combination of Nakayama and Anderson fails with respect to dependent claim 9, which includes all of

the limitations of claim 1 and recites additional features which further distinguish this claim from the combination of Nakayama with Anderson. Applicant respectfully submits, therefore, that claim 9 patentably distinguishes over the combination of Nakayama with Anderson and is in condition for allowance."

The examiner respectfully disagrees. Nakayama discloses plurality of switches and capacitors. When the switches are closed, a continuous connection between the input and the amplifier will occur. Thus, Nakayama discloses the recited limitations. Furthermore, based on the applicant's specification, paragraph 0014, the applicant discloses "A first circuit branch includes a switched capacitor that includes a switch 631 and capacitor 560. A second circuit branch includes a resistor 570 in series with capacitor 564 controlled by switch 633." As shown in Fig. 14, a switch, label 633, controls the input to the amplifier, label 580. Based on the specification, Nakayama et al discloses the limitation as discussed. Thus, the rejection of claim 9 stand as stated in the office action mailed 6/1/2007.

f. Regarding claims 18-20, the applicant contends

"Claims 18-20 are rejected under 35 USC §103(a) as being made obvious by the teachings of Nakayama in view of U.S. Patent No. 3,939,437 to Adam. Applicant respectfully traverses the rejection.

Concerning the third criteria which must be met to establish prima facie obviousness of a claimed invention, the combination of Nakayama with Adam must be shown to teach or suggest all of Applicant's claimed limitations. In particular, Applicant's claim 18 at least sets forth that "the input of the amplifier is continuously coupled to an output of the second device" as is similarly set forth in Applicant's claims 1 and 10 as discussed above. However, Nakayama requires the input to amplifier 30 to have a non-continuous connection to its input signal through operation of switch 20 (see FIG. 2 and column 2 line 65 to column 3 line 8), which is in direct contrast to Applicant's claim 18.

Thus, combining Nakayama with Adam, or any other reference that teaches a continuous connection to the input of an amplifier, to obtain a correspondence to Applicant's claim 18 is violative of the first and third criterion for establishing prima facie obviousness of Applicant's claim 18. It further follows that the combination of Nakayama and Adam fails with respect to dependent claims 19-20, which include all of the limitations of claim 18 and recite additional features which further distinguish these claims from the combination of Nakayama with Adam. Applicant respectfully submits, therefore, that claims 18-20 patentably distinguish over the combination of Nakayama and Adam and are in condition for allowance."

The examiner respectfully disagrees. Nakayama discloses plurality of switches and capacitors. When the switches are closed, a continuous connection between the input and the amplifier will occur. Thus, Nakayama discloses the recited limitations. Furthermore, based on the applicant's specification, paragraph 0014, the applicant discloses "A first circuit branch includes a switched capacitor that includes a switch 631 and capacitor 560. A second circuit branch includes a resistor 570 in series with capacitor 564 controlled by switch 633." As shown in Fig. 14, a switch, label 633, controls the input to the amplifier, label 580. Based on the specification, Nakayama et al discloses the limitation as discussed. The rejection has shown proper motivation for the combination. Thus, the rejection of claims 18-20 stand as stated in the office action mailed 6/1/2007.

g. Regarding claims 21-22, the applicant contends

"Claims 21-22 are rejected under 35 USC §103(a) as being made obvious by the teachings of Nakayama in view of Adam and further in view of O'Neil. Applicant respectfully traverses the rejection.

As discussed above, combining the teachings of Nakayama with Adam and O'Neil, or any other reference that teaches a continuous connection to the input of an amplifier, to obtain a correspondence to Applicant's claim 18 is violative of the first and third criterion for establishing prima facie obviousness of Applicant's claim 18. It further follows that the combination of Nakayama with Adam and O'Neil fails with respect to dependent claims 21-22, which include all of the limitations of claim 18 and recite additional features which further distinguish these claims from the combination of Nakayama with Adam and O'Neil. Applicant respectfully submits, therefore, that claims 21-22 patentably distinguish over the combination of Nakayama with Adam and O'Neil and are in condition for allowance."

The examiner respectfully disagrees. Nakayama discloses plurality of switches and capacitors. When the switches are closed, a continuous connection between the input and the amplifier will occur. Thus, Nakayama discloses the recited limitations. Furthermore, based on the applicant's specification, paragraph 0014, the applicant discloses "A first circuit branch includes a switched capacitor that includes a switch 631 and capacitor 560. A second circuit branch includes a resistor 570 in series with capacitor 564 controlled by switch 633." As shown in Fig. 14, a switch, label 633, controls the input to the amplifier, label 580. Based on the specification, Nakayama et al discloses the limitation as discussed. The rejection has shown proper motivation for the combination. Thus, the rejection of claims 21-22 stand as stated in the office action mailed 6/1/2007..